

CLAIMS

1. A process for producing a polyurethane foam,
which comprises allowing an organic polyisocyanate
5 component to react with a polyol component in the presence
of a catalyst with water as a foaming agent, wherein
the polyol component comprises at least 30% by
weight of a copolymerized lactone polyol having a hydroxyl
value of 20 to 350 KOHmg/g and being in the form of a liquid
10 at an ordinary temperature, and the copolymerized lactone
polyol is obtained by ring opening copolymerization of
 ϵ -caprolactone and δ -valerolactone in a molar ratio
[ϵ -caprolactone/ δ -valerolactone] of 80/20 to 20/80 with a
low molecular weight compound having at least two active
15 hydrogen groups as an initiator; and
the hydroxyl value of the polyol component is 40
to 400 KOHmg/g.

2. A process for producing a polyurethane foam
according to claim 1, wherein the low molecular weight
20 compound having at least two active hydrogen groups
comprises at least one member selected from the group
consisting of ethylene glycol, diethylene glycol, propylene
glycol, dipropylene glycol, 1,4-butanediol,
1,5-pentanediol, neopentyl glycol, 1,6-hexanediol,
25 glycerin, trimethylolpropane, triethanolamine and
pentaerythritol.

3. A process for producing a polyurethane foam

according to claim 1 or 2, wherein the viscosity of the copolymerized lactone polyol is not more than 20,000 mPa·s at 25°C.